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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,373	04/24/2001	Lenny Low	PA-Y0049	5868

7590 06/05/2002

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EXAMINER

PATEL, NIHIL B

ART UNIT	PAPER NUMBER
3743	

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.	09/841,373	Applicant(s)	LOW ET AL.
Examiner	Nihir Patel	Art Unit	3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on \_\_\_\_.  
2a) This action is FINAL.                    2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) \_\_\_\_ is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_ is/are allowed.  
6) Claim(s) 1-5 is/are rejected.  
7) Claim(s) \_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 24 April 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.  
12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.  
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.  
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Referring to claim 5, there is insufficient antecedent basis for limitations "the spacecraft".

### ***(10) Grounds of Rejection***

2. The following ground(s) of rejection are applicable to the appealed claims:

When referring to claim 1, the applicants states that the York Patent discloses "the first and second opposite facing payload radiators (28 and 108)" and "first and second opposite facing deployable radiators (28 and 108)" to be an error, but when looking at the figure 1 and the detailed description of the drawings more closely you can see that its not an error. Refer to figure 1 and lines 40 through 60 of column 2 and lines 1 through 6 of column 3. The applicant also claims that the York patent discloses a "radiator 28" which is the rectangular component at the bottom of the spacecraft body. It is noted that in figure 1 the lead line "28" does not extend to this component. Figure 1 in York's patent has many errors including lead line "28" that does not extend to this point, but if the applicant reads the detailed description more closely the applicant will see that the device of the present invention includes a radiator panel 28 located on the north and south sides of the platform module 14. Refer to detailed description of drawings column 3 lines 1 through 6. The applicant also states that numerals 106 and 108 are not used in the

specifications of the York Patent, although shown in figure 1, but as mentioned earlier figure 1 of York's patent has many errors and this is another one, but if the applicant reads the detailed description more closely, the applicant will see that 106 and 108 should be 16 and 18 refer to detailed description of drawings column 2 lines 50 through 55. The applicant makes an assumption by stating that "Component "22" which appears to include component 106 and 108 are opposite facing "reflectors 22" as is expressly stated in the York Patent", when reading the detailed description of the drawings there is no place where it states that components 106 and 108 are a part of reflectors 22.

The applicant also states that there are only two radiator panels 28 and there are no opposite facing deployable radiators disclosed or suggested in the York patent. However when referring to detailed description of the drawings, York clearly shows that there are first and second opposite facing payload radiators (16) and first and second opposite facing deployable radiators (28). Refer to column 2 lines 50 through 56. The applicant further states that there are no cross coupling heat pipes that cross couple opposite facing payload and deployable radiators in the York Patent. However when reading the detailed description of the drawings it states that there are coupling heat pipes that cross couple opposite facing payload and deployable radiators. Refer to figures 1,2, and 3 and column 3 lines 13 through 45. Request for withdrawal of rejection of claim1 is denied.

Referring to claim 3, the applicant states that the York patent does not disclose or suggest first and second opposite facing deployable radiators or one or more coupling heat pipes that cross couple opposite facing payload and deployable radiators. York clearly shows that there are first and second opposite facing deployable radiators (28) or one or more coupling heat pipes that

cross couple opposite facing payload and deployable radiators. Refer to figures 1,2, and 3, column 2 lines 50 through 56, and column 3 lines 13 through 45. Request for withdrawal of rejection of claim 3 is denied.

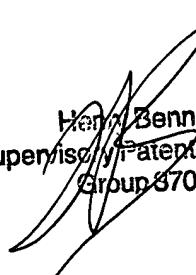
In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, It is obvious that York patent discloses or suggest the use of opposite facing payload and deployable radiators or that the respective payload radiators are cross-coupled to an opposite facing deployable radiator. Therefore request for withdrawal of rejection of claim 5 is denied.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Nihir Patel whose telephone number is (703) 306-3463. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful the examiner supervisor Henry Bennett can be reached at (703) 308-0101.

NP  
March 12, 2002

  
Henry Bennett  
Supervisory Patent Examiner  
Group 3700